

FINAL

**ENVIRONMENTAL IMPACT REPORT
FOR THE EXPANSION OF THE
ANTONIO TEXEIRA DAIRY**

CONDITIONAL USE PERMIT NO. 05-033

Prepared by:

**COUNTY OF MERCED
DEPARTMENT OF PLANNING
& COMMUNITY DEVELOPMENT**

With the technical assistance of:

 **PLANNING PARTNERS**

SCH No. 2006011076

July 2006

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SCH No. 2006011076

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1 INTRODUCTION

1.1 CEQA PROCESS

In preparing an Environmental Impact Report (EIR), the California Environmental Quality Act (CEQA) requires public agencies to circulate a Draft EIR (DEIR) for public and agency review and comment. The public agency then uses the comments obtained by this review to modify or correct the EIR for subsequent use in project review and consideration. The document containing the text of any comments received on the DEIR, responses of the lead agency to these comments, and any corrections or amendments to the EIR is termed the Final EIR (FEIR).

The DEIR for the Antonio Texeria Dairy Expansion project was circulated from May 19, 2006 to July 7, 2006. The County accepted written comments on the DEIR during this period. This FEIR has been prepared to respond to the comments received on the DEIR for the Antonio Texeria Dairy Expansion project.

Consistent with the requirements of §15132 of the CEQA Guidelines, this FEIR consists of:

- The DEIR published on May 19, 2006 (incorporated by reference);
- A list of persons, organizations, and public agencies commenting on the DEIR;
- Comments received on the DEIR;
- The response of the Merced County Planning Department of Planning and Community Development to significant environmental issues raised in the review and consultation process; and,
- Modifications to the EIR arising from the County's response to comments received on the DEIR.

This “response to comments” document, together with the DEIR for the Antonio Texeria Dairy Expansion project, constitutes the FEIR for the project. This document incorporates comments received on the DEIR, as well as responses by the lead agency (Merced County) to these comments. The FEIR is an informational document that must be considered and certified by the lead agency prior to considering approval of the Antonio Texeria Dairy Expansion project.

1.2 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

CEQA requires the evaluation of government actions or private activities permitted by government to determine their effects on the environment. When such an action could have a significant effect on the environment, the agency with primary responsibility over the approval of the project (the lead agency) is required to prepare an environmental impact report (EIR). As stated in CEQA Guidelines §15121:

An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency (when considering whether to approve a project).

An EIR is the public document used to meet these requirements. The EIR must also disclose: significant adverse environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects. For this EIR, an “impact” or “significant impact” is assumed to be an adverse effect on the environment.

This EIR is intended to provide information to the public and to decision makers regarding the potential environmental effects of approval and implementation of the Antonio Texeria Dairy Expansion project. Prior to considering approval of this request, the Merced County Planning Commission must certify that this EIR is adequate under CEQA and that they have considered the information herein. Upon making this finding, the Merced County Planning Commission may then consider approval of the Antonio Texeria Dairy Expansion project.

1.3 TYPE OF ENVIRONMENTAL IMPACT REPORT

This EIR is being prepared as a “Project” EIR pursuant to Section 15161 of the CEQA Guidelines. A project EIR is prepared to examine the environmental impacts of a specific development project. According to the CEQA Guidelines, “(t)his type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.” This EIR is intended to serve as the environmental document for all activities related to the Antonio Texeira Dairy Expansion project, including issuance of a Conditional Use Permit and issuance of construction and building permits.

1.4 MITIGATION MONITORING PROGRAM

CEQA requires that public agencies carrying out or approving certain projects must adopt mitigation monitoring or reporting programs to ensure the implementation and effectiveness of mitigation measures. Consequently, mitigation measures identified in this EIR that are necessary to reduce or eliminate potentially significant adverse environmental effects are subject to this monitoring requirement. Copies of the mitigation monitoring program, which must be adopted upon approval of the Antonio Texeira Dairy Expansion project, are available from the Merced County Department of Planning and Community Development at 2222 M Street, Merced, California 95340.

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2 EXECUTIVE SUMMARY OF THE EIR

2.1 PROJECT SUMMARY

The project sponsor has applied for a Conditional Use Permit from Merced County to expand an existing dairy by converting an existing, occupied corral with feed stanchions to a freestall barn so that the modified dairy would house a total of 1,250 Holstein milk cows, 250 dry cows, 400 bred heifers, 150 heifers 1 year to breeding, 400 calves aged 3 to 12 months, and 150 baby calves (2,600 animals and 2,904 animal units [AU]). The facility would be located on an approximate 84-acre portion of a 218-acre site. The proposed construction to house the expanded herd would consist of the constructing a roof over an existing corral that is currently uncovered (see Chapter 3, *Project Description*). Wastewater is currently used for the irrigation of forage crops on a total of 217.6 acres in the surrounding area, and would be used on a total of 244 acres with project implementation. Tailwater from the irrigation system is recovered and fed back into the irrigation system.

2.2 SUMMARY OF PROJECT ALTERNATIVES

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe and comparatively evaluate a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Thus, the range of alternatives evaluated in the following analysis is dictated by the range of significant impacts identified in the Draft EIR (DEIR), and evaluated alternatives are limited to those that would reduce or eliminate identified environmental impacts. As discussed in this EIR, the secondary and cumulative impacts of implementing the Antonio Teixeira Dairy Expansion project would lead to significant adverse and unavoidable impacts. As discussed in Section 9.2 of the DEIR, an Alternate Onsite Location of the Proposed Milk Barn Alternative and an Additional Acreage for Wastewater Disposal Alternative were considered. This evaluation determined that such alternatives would result in a highly inefficient dairy operation, and were subject to scientific uncertainty. Thus, they were rejected as infeasible. Accordingly, no other alternative, beyond the required No Project alternative, was formulated as an alternative to the proposed Antonio Teixeira Dairy Expansion project.

The EIR analyzed the required No Project alternative. Under the No Project Alternative, the proposed project would not be implemented. The existing dairy facilities and operations currently developed on the project site would continue to be used for the existing dairy herd

consisting of 1,675 animals (2,065 AU). Additional agricultural activities permitted under the General Agriculture zoning designation would continue.

2.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. The level of significance for each environmental impact is indicated both before and after mitigation. For a detailed discussion of the proposed project impacts and mitigation measure, see Chapters 4 through 10, in the DEIR.

Table 2-1 Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
Land Use					
<p><i>Impact LU-1: Consistency with applicable environmental plans or policies</i></p> <p>Implementation of the proposed Antonio Texeira Dairy Expansion project would be compatible with the <i>Merced County General Plan</i> and Zoning Ordinance policies with approval of the Conditional Use Permit.</p>	LS		None required.	LS	
<p><i>Impact LU-2: Land use compatibility with existing residential and community uses adjacent to the project area</i></p> <p>Implementation of the proposed Antonio Texeira Dairy Expansion project could be incompatible with existing residences and the nearby community of Cressey due to the siting of active dairy facilities in close proximity to these uses.</p>		PS	<p><i>Mitigation Measure LU-2a:</i></p> <p>Plant a triple row of large-leaf, fast growing trees along the southwestern boundary of the project site adjacent to the existing neighbors to the southwest. If a deciduous tree species is chosen, it will be important to ensure leaf coverage of the tree during the fly seasons. Until the planted trees have grown to a height of 12 feet, the onsite fields adjacent to the offsite residence shall be planted in corn during the summer growing season to provide a vertical resting surface to intercept flies generated by the dairy.</p> <p><i>Mitigation Measure LU-2b:</i></p> <p>Implement the odor control measures set forth in mitigation measure AQ-7.</p> <p><i>Mitigation Measure LU-2c:</i></p> <p>Implement the nuisance control measures set forth in mitigation measures HAZ-1 and HAZ-2.</p>		SU
Air Quality					
<p><i>Impact AQ-1: Construction-related emissions of ROG, NOx and Fugitive Dust</i></p> <p>Construction activities associated with the dairy expansion would result in short-term emissions including ROG, NOx and PM₁₀.</p>	LS		None required.	LS	

LS=Less than significant

PS=Potentially Significant

SU=Significant and unavoidable

Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
<p><i>Impact AQ-2: Carbon monoxide (CO) emissions from operational equipment and increased traffic</i></p> <p>Operation of equipment used at the Antonio Teixeira Dairy Expansion for processing and farming result in the emissions of carbon monoxide. Because the magnitude of emissions from the Antonio Teixeira Dairy Expansion does not exceed SJVAPCD significance criteria, this would be a less-than-significant impact.</p>	LS		None required.	LS	
<p><i>Impact AQ-3: Ozone precursor emissions (Reactive Organic Gases and Nitrogen Oxides) from dairy operations, farm equipment, and increased traffic</i></p> <p>Emissions of ROG and NO_x from operations, farm equipment, and increased traffic at the Antonio Teixeira Dairy Expansion would exceed SJVAPCD emissions criteria with expansion of the herd.</p>		PS	<p><i>Mitigation Measure AQ-3:</i></p> <p>The applicant shall implement the above requirements of the ACO; comply with SJVAPCD Rules 2201 (New and Modified Stationary Source Review), 4570 (Confined Animal Facilities) and 4701 and 4702 (Internal Combustion Engines); apply for an Authority to Construct/Permit to Operate in compliance with SJVAPCD New Source Review; and implement BACT and BACRT appropriate for this dairy operation as determined by SJVAPCD.</p>		SU
<p><i>Impact AQ-4: PM₁₀ and PM_{2.5} emissions from fugitive dust during project operations</i></p> <p>Operations from the Antonio Teixeira Dairy Expansion currently result and would continue to result in fugitive dust (PM₁₀ and PM_{2.5}) emissions from farming operations, animal movement in unpaved corrals, vehicle use along unpaved driveways and access roads, and equipment operation.</p>		PS	<p><i>Mitigation Measure AQ-4:</i></p> <p>The applicant shall implement the above requirements of the ACO; submit a CMP in compliance with SJVAPCD Rule 4550; implement SJVAPCD Rule 8081 of Regulation VIII, which applies to farming operations; and comply with Rule 3135, Dust Control Plan Fee.</p>		SU
<p><i>Impact AQ-5: Ammonia and hydrogen sulfide emissions from project operations</i></p> <p>Manure from animals at the Antonio Teixeira Dairy Expansion is a source of ammonia and hydrogen sulfide emissions.</p>		PS	<p><i>Mitigation Measure AQ-5:</i></p> <p>The applicant shall implement the requirements of Chapter 18.48.050 U and OO of the Merced County Animal Confinement Ordinance, and any future regulations promulgated by the Environmental Protection Agency and the San Joaquin Valley Air Pollution Control District</p>		SU

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Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
<p>Impact AQ-6: Greenhouse gas emissions from project operations</p> <p>Animal digestion, manure, and cultivation activities at the Antonio Teixeira Dairy Expansion are and would continue to be a source of greenhouse gas emissions.</p>		PS	<p>Mitigation Measure AQ-6:</p> <p>The applicant shall implement the requirements of Chapter 18.48.050 U and OO of the Merced County Animal Confinement Ordinance, and any future regulations promulgated by the Environmental Protection Agency and the San Joaquin Valley Air Pollution Control District.</p>		SU
<p>Impact AQ-7: Adverse odor from project operations</p> <p>Operations and manure management at the Antonio Teixeira Dairy Expansion may emit odors that may be bothersome to isolated rural residents, the only nearby sensitive receptors.</p>		PS	<p>Mitigation Measure AQ-7a:</p> <p>The applicant shall establish a point of contact for odor complaints at the facility. Inform all neighbors within the windshed of the facility of methods to contact this individual.</p> <p>Mitigation Measure AQ-7b:</p> <p>Implement odor control measures required by the ACO EIR to include, but not be limited to measures included on pages 6-82 to 6-83 of this EIR.</p> <p>Mitigation Measure AQ-7c:</p> <p>If nuisance conditions are reported to the DEH, the Division shall take the following actions:</p> <p style="padding-left: 40px;">Within 72 hours of receiving a complaint, the DEH shall determine whether an odor exists during an inspection of the location of the complaint, and identify potential sources of odor in the vicinity. If an animal confinement facility is identified as a potential source of the odor nuisance, the County will evaluate the affected facility and identify sources of the odor. In the event of odor causing a nuisance, the County will impose additional control measures on a site-specific basis. Measures that may be required by DEH include the operational measures set forth on pages 6-79 to 6-81 of this EIR.</p> <p>Mitigation Measure AQ-7d:</p> <p>If odor nuisance conditions are confirmed, and are attributable to operations at an animal confinement facility, the DEH shall require the owner/operator to remedy the nuisance condition within a</p>		SU

Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>specified period of time. The Division shall notify the parties reporting the nuisance of its findings, and shall provide follow-up inspections to ensure that the nuisance condition is cured. Should the condition persist, the Division shall initiate an enforcement action against the offending operator.</p> <p>Mitigation Measure AQ-7e: Implement mitigation measures LU-2 A and C.</p>		
Hydrology and Water Quality					
<p>Impact HYD-1: Degradation of water quality due to stormwater runoff during project construction</p> <p>Construction of the proposed project could result in minimal erosion of onsite soils or loss of topsoil during construction, and therefore would not cause the degradation of water quality in waterways draining the site by reducing the quality of stormwater runoff during project construction</p>	LS		None required.	LS	
<p>Impact HYD-2: Violation of regulations related to the handling of waste</p> <p>Implementation of the Antonio Teixeira Dairy Expansion project could result in continued violation of adopted regulations related to waste discharge.</p>		PS	<p>Mitigation Measure HYD-2:</p> <p>Comply with the requirements of the ACO and elements of the CNMP for the Antonio Teixeira Dairy, including, but not limited to:</p> <ul style="list-style-type: none"> • Implement cropland soil quality sampling and the application of wastewater at an agronomic rate as set forth in the CNMP. • Implement the improvements to manure handling practices as required by the CNMP, including: (1) increase the frequency of solid manure removal from the open corrals; (2) increase circulation within the wastewater settling and treatment ponds, in addition of tailwater return ponds, with the installation of aeration pumps; (3) Modify the existing tailwater ponds to return irrigation tailwater to the head or irrigation or the waste management system rather than allow infiltration; (4) Establish double-cropping with the crop rotation identified in the CNMP of the 26.4 acres of the 244-acre application area described in the CNMP currently not being used for manure application. 	LS	

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Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
<p><i>Impact HYD-3: Degradation of surface water quality</i></p> <p>The proposed project would not result in the degradation of surface water quality.</p>	LS		None required.	LS	
<p><i>Impact HYD-4: Groundwater contamination from operation of the Antonio Texeira Dairy Expansion</i></p> <p>Construction and operation of the Antonio Texeira Dairy Expansion project could result in degradation of groundwater resources.</p>		PS	<p><i>Mitigation Measure HYD-4a:</i> Implement Mitigation Measure HYD-2.</p> <p><i>Mitigation Measure HYD-4b:</i> At a minimum, annual groundwater monitoring of onsite monitoring wells and soil monitoring on the project site shall be completed. A monitoring plan to be completed by the project applicant and Merced County Division of Environmental Health will detail the sampling elements.</p> <p><i>Mitigation Measure HYD-4c:</i> The Division of Environmental Health shall make a final inspection of the facility prior to the commencement of operations in Merced County to confirm the dairy meets all local and state requirements.</p> <p><i>Mitigation Measure HYD-4d:</i> Comply with requirements of the ACO and the Merced County CNMP, or implement all applicable RWQCB requirements when required by any new WDR regulations adopted by the RWQCB.</p>		SU
<p><i>Impact HYD-5: Depletion of groundwater resources and increased potential for subsidence</i></p> <p>Implementation of the proposed project could result in depletion of groundwater resources, and therefore an increased potential for subsidence.</p>	LS		None required.	LS	
<p><i>Impact HYD-6: Modification of surface water drainage patterns</i></p> <p>Implementation of the proposed dairy expansion project would not modify surface water drainage patterns, and would not cause localized off-site migration of runoff, erosion, and/or flooding.</p>	LS		None required.	LS	

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Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
<p><i>Impact HYD-7: Increase in runoff</i> Construction and operation of the Antonio Texeira Dairy Expansion would result in an increase in impervious surfaces, potentially increasing runoff volumes and velocities.</p>	LS		None required.	LS	
<p><i>Impact HYD-8: Exposure to flood risks</i> The project site would not be subject to a flood event, during which dairy facilities could be damaged, or floodwaters could inundate dairy facilities and fields where wet or dry manure had been recently applied, causing impacts to surface water quality.</p>	LS		None required.	LS	
<p><i>Impact HYD-9: Water supply pathways for pollutant migration</i> Existing water supply wells onsite and adjacent to the proposed dairy expansion may represent preferred pathways for pollutant migration to groundwater.</p>		PS	<p><i>Mitigation Measure HYD-9:</i> All existing water supply wells at the facility site and property shall be inspected by the Merced County Division of Environmental Health to ensure that each well is properly sealed at the surface to prevent infiltration of waterborne contaminants into the well casing or surrounding gravel pack. If any of the wells are found not to comply with the Merced County Well Ordinance standards, the project applicant shall retain a qualified professional as described in the respective Ordinance to install the required seal or functional equivalent. Documentation of the inspections and seal installations, if any, shall be provided to the County Division of Environmental Health prior to commencement of dairy expansion operations.</p>	LS	

Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
Hazards (Nuisance Insects)					
<p><i>Impact HAZ-1: Mosquitoes</i></p> <p>Implementation of the proposed Antonio Teixeira Dairy Expansion project could provide additional mosquito-breeding habitat.</p>		PS	<p><i>Mitigation Measure HAZ-1:</i></p> <p>Adherence to the guidelines of the Merced County Mosquito Abatement District and correct design and management of the dairy wastewater containment systems are required to comply with the Merced County ACO and would prevent significant mosquito production. The following additional measures are identified to further reduce adverse effects from mosquitoes.</p> <p><i>Mitigation Measure HAZ-1a:</i></p> <p>The Vector Control Plan for mosquitoes required by the Merced County Animal Confinement Ordinance, shall contain, but not be limited to, the operational measures set forth on pages 8-9 to 8-10 of this EIR to be implemented during project operations as identified by University of California Cooperative Extension (UCCE).</p> <p><i>Mitigation Measure HAZ-1b:</i></p> <p>If requested, the project proponent will pay any excess treatment cost expended by the Mosquito Abatement District.</p> <p><i>Mitigation Measure HAZ-1c:</i></p> <p>To ensure compliance with ACO and Merced County Mosquito Abatement District (MCMAD) requirements, prior to the issuance of a building permit by the County Building Division, the Merced County Division of Environmental Health (DEH) and MCMAD shall inspect waste management and irrigation systems at the Antonio Teixeira Dairy to ensure that they are in compliance with ACO mosquito control requirements, Mosquito Abatement District requirements, and the additional requirements of this mitigation measure. Building permits may be issued upon written assurance from DEH and the MCMAD that the facility is in compliance with these requirements.</p>	LS	

Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
<p>Impact HAZ-2: Flies</p> <p>Implementation of the proposed Antonio Teixeira Dairy Expansion project could produce an additional source of flies that can adversely affect animal and human health, and become a nuisance for other adjacent land uses.</p>		PS	<p>Mitigation Measure HAZ-2a:</p> <p>The following operational measures identified in the EIR for the ACO shall be implemented.</p> <ol style="list-style-type: none"> 1. All confined animal facilities shall implement the Best Management Practices set forth on page 8-12 of this EIR to address potential fly problems. 2. In addition to fly management practices in the cattle housing and milking areas of dairy facilities, the sanitation practices set forth on page 8-13 of this EIR shall be implemented at animal confinement facilities to control fly populations. <p>Mitigation Measure HAZ-2b:</p> <p>As required by mitigation measure LU-2a, plant a triple row of large-leaf, fast growing trees along the southern and western boundary of the project adjacent to the existing neighbor to the west (south boundary of field 13). If a deciduous tree species is chosen, it will be important to ensure leaf coverage of the tree during the fly seasons. Until the planted trees have grown to a height of 12 feet, the onsite fields adjacent to the offsite residence shall be planted in corn during the summer growing season to provide a vertical resting surface to intercept flies generated by the dairy.</p>	SU	
Cumulative Impacts					
Air Quality		PS	None available beyond implementing the requirements of Chapter 18.48.050 U and OO of the Merced County Animal Confinement Ordinance, and existing and future regulations promulgated by the Environmental Protection Agency and the San Joaquin Valley Air Pollution Control District.		SU
Biological Resources	LS		No project cumulatively considerable contribution to cumulative impact.	LS	
Cultural Resources	LS		No project cumulatively considerable contribution to cumulative impact.	LS	
Geological Resources	LS		No project cumulatively considerable contribution to cumulative impact.	LS	

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Environmental Impact	Level of Significance before Mitigation		Mitigation Measure	Level of Significance After Mitigation	
	LS	PS		LS	SU
Hazards	LS		No project cumulatively considerable contribution to cumulative impact.	LS	
Hydrology and Water Quality		PS	None available.		SU
Land Use		PS	None available.		SU
Mineral Resources	LS		No project cumulatively considerable contribution to cumulative impact.	LS	
Noise	LS		No project cumulatively considerable contribution to cumulative impact.	LS	
Transportation	LS		No project cumulatively considerable contribution to cumulative impact.	LS	
Utilities and Service Systems	LS		No project cumulatively considerable contribution to cumulative impact.	LS	

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3 PUBLIC COMMENT AND RESPONSE TO COMMENTS

3.1 PUBLIC COMMENTS AND RESPONSES

CEQA requires public disclosure in an Environmental Impact Report (EIR) of all project environmental effects and encourages public participation throughout the EIR process. As stated in Section 15200 of the CEQA Guidelines, the purposes of public review of environmental documents are:

- sharing expertise;
- disclosing agency analyses;
- checking for accuracy;
- detecting omissions;
- discovering public concerns; and,
- soliciting counter-proposals.

Section 15201 of the CEQA Guidelines states that “(p)ublic participation is an essential part of the CEQA process.” A public review period of no less than 30 days nor longer than 60 days is required for a Draft EIR (DEIR) under §15087(c) of the CEQA Guidelines. If a State agency is a lead or responsible agency for the project, the public review period shall be at least 45 days. In this case, a review period extending from May 19, 2006 to July 7, 2006 was established. Merced County is the lead agency for this project (i.e., the agency that has primary discretionary approval authority over portions of the project) and will certify the EIR during project consideration. The Regional Water Quality Control Board and the San Joaquin Valley Air Pollution Control District are responsible agencies (i.e., agencies that have more limited discretionary approval authority than the lead agency) and will be required to use this EIR in their consideration of the proposed Antonio Texeira Dairy expansion project.

During circulation of the DEIR from May 19, 2006 to July 7, 2006, Merced County received comments on the EIR. For every written comment received from the public, agencies, and organizations, Merced County has provided a written response. The comments and response to comments are included in the following pages. A list of commentors is provided below.

For comments that advocate that Merced County take a certain action, or where the comment has stated the belief or opinion of the author, the response to comment notes that Merced County will consider the views of the commentor in the County’s deliberation of the Antonio Texeira Dairy expansion project. No other response to such a comment is provided. This is not to diminish the importance of such comments, but rather to ensure that the substance of the comment is debated and considered by the decision-makers of Merced County and not the authors of the EIR.

COMMENTOR

COMMENT IDENTIFICATION

FEDERAL AGENCY COMMENTS

None received

STATE AGENCY COMMENTS

Governor's Office of Planning and Research, State Clearinghouse Unit	A
Department of Water Resources	B
Transportation, Department of (Caltrans)	C

LOCAL AND REGIONAL AGENCY COMMENTS

San Joaquin Valley Air Pollution Control District	D
---	---

PUBLIC UTILITY AND SERVICE PROVIDER COMMENTS

Merced Irrigation District	E
Merced County Mosquito Abatement District	F

CITIZEN / NON-GOVERNMENTAL ORGANIZATIONS COMMENTS

None received



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

July 5, 2006

Letter A

Robert D. Klousoer
Merced County
2222 M Street
Merced, CA 95340

Subject: Antonio Teixeira Dairy Expansion
SCH#: 2006911076

Dear Robert D. Klousoer:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 3, 2006, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

A-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,
Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 8044 SACRAMENTO, CALIFORNIA 95812-8044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2004011076
Project Title Antonio Teixeira Dairy Expansion
Lead Agency Merced County

Type EIR Draft EIR
Description Construction of a freestall barn to increase the permitted capacity from 1,675 head to 2,600 head.

Lead Agency Contact

Name Robert D. Klausner
Agency Merced County
Phone (209) 385-7654 / (816) **Fax**
email 852-7626
Address
City 2222 M Street
 Merced State CA Zip 95340

Project Location

County Merced
City
Region
Cross Streets Livingston Cressay Road / Cressay Way
Parcel No. Various
Township 6S **Range** 12E **Section** 7, 8 **Base** MD

Proximity to:

Highways
Airports
Railways BNSF
Waterways Merced River
Schools Cressay ES
Land Use Dairy; field crops / General Agricultural / Agricultural

Project Issues Cumulative Effects; Landuse; Other Issues; Water Quality

Reviewing Agencies Resources Agency; Regional Water Quality Control Bd., Region 5 (Fresno); Department of Parks and Recreation; Native American Heritage Commission; Integrated Waste Management Board; Department of Health Services; Department of Fish and Game, Region 4; Department of Water Resources; Caltrans, District 10; Air Resources Board, Major Industrial Projects; Department of Toxic Substances Control

Date Received 05/19/2006 **Start of Review** 05/19/2006 **End of Review** 07/03/2006

Response to Letter A

Commentor Governor's Office of Planning and Research, State Clearinghouse Unit,
July 5, 2006

A-1 The letter indicates that Merced County has properly complied with the State Clearinghouse Review requirements for draft environmental documents. The comment additionally transmits comment letters from the California Department of Water Resources and Caltrans.

The comments raises no environmental issues, and no further response or modification of the EIR is necessary to respond. For the County's response to the comments submitted by the Department of Water Resources, see response to Letter B below. For the County's response to the comments submitted by Caltrans, see response to Letter C, below.

0018 01101

Letter B

STATE OF CALIFORNIA - THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P. O. BOX 942836
SACRAMENTO, CA 942360001
(916) 653-5791



JUN 28 2006

Robert D. Klousner
Merced County
2222 M Street
Merced, California 95340



Antonio Texeira Dairy Expansion
State Clearinghouse (SCH) Number: 2006011076

Staff for the Department of Water Resources has reviewed the subject document and provides the following comments:

Portions of the proposed project may be located within a regulated stream over which The Reclamation Board has jurisdiction and exercises authority. If the project includes any "channel reconfiguration" that was not previously permitted, new plans must be submitted. Section 8710 of the California Water Code requires that a Board permit must be obtained prior to start of any work, including excavation and construction activities, within floodways, levees, and 10 feet landward of the landside levee toes. A list of streams regulated by the Board is contained in the California Code of Regulations, Title 23, Section 112. The application and Title 23 regulations can be found on the Reclamation Board's website at www.recbd.ca.gov.

Section 8(b)(2) of the Regulations states that applications for permits submitted to the Board must include a completed environmental questionnaire that accompanies the application and a copy of any environmental documents if they are prepared for the project. For any foreseeable significant environmental impacts, mitigation for such impacts shall be proposed. Applications are reviewed for compliance with the California Environmental Quality Act.

Section 8(b)(4) of the Regulations states that additional information, such as geotechnical exploration, soil testing, hydraulic or sediment transport studies, biological surveys, environmental surveys and other analyses may be required at any time prior to Board action on the application.

You may disregard this notice if your project is outside of the Board jurisdiction. For further information, please contact me at (916) 574-1249.

Sincerely,

Mike Mirmazaheri, Chief
Floodway Protection Section

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

B-1

Response to Letter B

Commentor Department of Water Resources, Floodway Protection Section
June 28, 2006

B-1 The comment states that the project may be located within a regulated stream over which the Reclamation has jurisdiction and exercises authority. If the project includes any “channel reconfiguration” that was not previously permitted, new plans must be submitted to and a permit must be obtained. Permit applications must include a completed environmental questionnaire, copy of any environmental documents, and if appropriate, mitigations measures. The Board may also require additional environmental information prior to action on the permit application.

Comment noted. At this time the project does not include modification of any regulated stream or any channel reconfiguration under the jurisdiction of the Reclamation Board. All development proposed by the project would occur outside of the floodway. If there are proposed modifications to a regulated stream at some future time, the Reclamation Board will be consulted and appropriate permit applications and environmental documentation shall be completed.

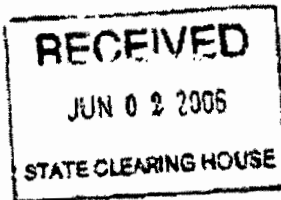
JUL 2 2006 11:14PM CA DEPARTMENT OF TRANSPORTATION

No. 5302 P. 2/2

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWABENBERGER, Inc.

DEPARTMENT OF TRANSPORTATION
P.O. BOX 2048 STOCKTON, CA 95201
(1976 E. CHARTER WAY/1976 E. DR. MARTIN
LUTHER KING JR. BLVD. 95205)
TTY: California Relay Service (800) 735-2929
PHONE (209) 941-1921
FAX (209) 944-7194



Plan your journey
Be energy efficient!

June 7, 2006

10-MER-99-PM 29.57
Draft EIR
Antonio Teixeira Dairy
SCH 2006011076

Robert D. Klousner
County of Merced
Planning and Community Development
2222 M Street
Merced, CA 95340

Letter C

Dear Mr. King:

The Department of Transportation (Department) appreciates the opportunity to review and comment on the Draft Environmental Impact Report for Antonio Teixeira Expansion construction of a freestall barn to increase capacity of the existing dairy located west of the Santa Fe Railroad, north of Livingston Cressey Road. The Department has the following comments:

- Our comment letter dated February 17, 2006 still applies. In-addition, please refer to Page 6 of the Initial Study, Conditional Use Permit No. 05033 for Antonio Teixeira Dairy Expansion, which states "A truck route plan shall be submitted to the Road Division." Please provide the truck route plan before approval of this project.

C-1

If you have any questions, please contact Dee Maddox at (209) 942-6022 (email: dee_maddox@dot.ca.gov) or me at (209) 941-1921. We look forward to continuing to work with you in a cooperative manner.

Sincerely,

TOM DUMAS, Chief
Office of Intermodal Planning

cc: Scott Morgan
State Clearinghouse

"Caltrans Improves mobility across California"

Response to Letter C

Commentor California Department of Transportation, District 10,
June 6, 2006

C-1 This comment refers to Page 6 of the Initial Study which states, “A truck route plan shall be submitted to the Road Division.” The comment requests that the project provide a truck route plan prior to approval of the project.

In response to the IS/NOP, (which states on Page 64, “There would be no increase in vehicle trips with implementation of the proposed expansion”) the Merced County Department of Public Works Road Division sent a memorandum on January 11, 2006 (included in Appendix B of the DEIR) that “DPW/Road Division does not have any conditions to place on this permit.” Given that the proposed dairy expansion would not generate any new trips and that the Road Division has no conditions for the Conditional Use Permit, no truck route plan will be prepared prior to approval of the project.



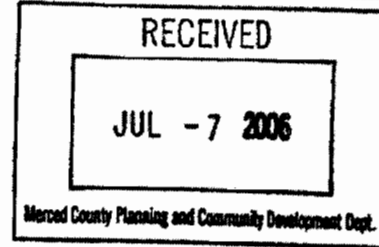
San Joaquin Valley
Air Pollution Control District

Letter D

July 5, 2006

District Reference #: C20060909

John LeVan
County of Merced
Department of Planning and Community Development
2222 M Street
Merced, CA 95340



Re: Draft EIR for Antonio Texeira Dairy

Dear Mr. LeVan:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above for the increase in herd capacity to Antonio Texeira Dairy (350 milk cows and 125 dry cows) and offers the following comments:

D-1

The San Joaquin Valley's air quality has been designated nonattainment by the EPA and by the Air Resources Board (ARB) for ozone and fine particulate matter (PM10). The Federal Clean Air Act (CAA) and the California Clean Air Act require areas designated nonattainment to reduce emissions until standards are met.

The District concurs with the regulatory and environmental characterization for air quality found in the Draft EIR (DEIR). The proposed project will be subject to District Rule 2201 (New and Modified Stationary Source Review Rule), which requires Best Available Control Technology (BACT) for new emissions units which result in an increase in permitted emissions greater than 2.0 lbs/day. The proposed project will trigger BACT requirements for VOC, PM₁₀, and ammonia (NH₃). For questions on permitting requirements and/or BACT, the applicant should contact **Mr. Ramon Norman, Air Quality Engineer, at (559) 230-5909**. Depending on the nature and complexity of the application and staff workload, permitting approval may take several months. Permit applications should be submitted to the District as soon as possible to avoid delays in the project.

D-2

The District notes that the Antonio Texeira dairy is an existing facility. The existing dairy (after the increase in herd size) will be subject to District Rule 4570: Confined Animal Facilities, which was adopted by the District's Governing Board on June 15, 2006.

D-3

The District concurs with the County's assessment of *Impact AQ-1: Construction-related emissions of ROG, NOx, and Fugitive Dust* and *Impact AQ-2: Carbon monoxide (CO) emissions from operational equipment and increased traffic* as less than significant.

D-4

Based on preliminary estimates, the operational emissions from the expansion at Antonio Texeira Dairy will not exceed the District's Thresholds of Significance for ozone precursors [10 tons per year of either Reactive Organic Gases (ROGs) or Oxides of Nitrogen (NOx)]. Although the District recognizes the authority of the County to determine its own thresholds of significance, *Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic* are below the District's thresholds contained in its Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). Ozone precursor emissions from the expansion are estimated to be 5.82 tons per year and would be considered less than significant based on these criteria. The District defines substantial contribution for ozone precursor

D-5

emissions in terms of California Clean Air Act requirements, which established the new source review offset threshold for stationary sources at 10 tons per year thresholds for ozone precursors on the basis of the District's attainment status.¹

The District concurs with the County's assessment of *Impact AQ-4: PM10 and PM2.5 emissions from fugitive dust during project operations* as significant. The applicant should be aware that as part of the permitting process more detailed analysis will be conducted through Ambient Air Quality Analysis (AAQA) modeling. Many dairies are finding that PM impacts are a significant issue. The applicant is encouraged to apply for an ATC as expeditiously as possible to determine the project's AAQA impacts. In some cases, additional mitigation measures to reduce PM10 emissions have been required as permit conditions to avoid a significant contribution to a violation of the state air quality standard.

D-5
cont.

D-6

With regard to *Impact AQ-5: Ammonia and hydrogen sulfide emissions from project operations*, the following information should be considered. Although, ammonia emissions are a concern because they are a secondary source for the formation of ammonium nitrate particulate matter, recent research findings indicate that a control strategy focused on NOx reductions alone would be most effective. This is because the limiting component in the formation of ammonium nitrate is nitric acid, so the reduction in NOx or to lesser extent VOC will lead to less ammonium nitrate formation.² Therefore the added ammonia emissions will not contribute significantly to a decline in air quality. In high concentrations ammonia emissions may be significant with respect to workers health. The inhalation reference exposure level for ammonia is 3,200 ug/m³ for 1 hour. At this level of concentration, a person would experience eye and respiratory irritation. Since ammonia is volatile and the emissions occur mostly in open areas, ambient concentrations at the dairy will be well below this level. A credible emission factor does not exist for hydrogen sulfide emissions from animal manure. While hydrogen sulfide can present a workplace hazard in confined spaces, open-air areas generally do not present such a risk. The District's thresholds for toxic and hazardous pollutants are based on the probability of contracting cancer of the Maximally Exposed Individual (MEI) of 10 in one million or a ground-level concentration of non-carcinogenic toxic air contaminants resulting in a Hazard Index greater than 1 for the MEI. The District will perform a Health Risk Assessment (HRA) to determine if air quality impacts from ammonia and hydrogen sulfide emissions exceed these amounts. The District requires significant impacts from these pollutants to be mitigated to a level that is below the significance thresholds as a condition of the authority to construct. For more information on HRAs, please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at (559) 230-5881, or hramodeler@valleyair.org.

D-7

Although Greenhouse Gas [Methane (CH₄), Nitrous Oxide (N₂O)] generation will be considerable, the District does not have authority to regulate these pollutants and offers no comment regarding the significance of this impact.

D-8

The District concurs with the County's assessment of *Impact AQ-7: Adverse odor from project operations* as being significant. Several residences are located within the District's screening level for potential odor sources (1 mile for Feed Lot/Dairy). Significant odor problems are defined in the GAMAQI as: more than one confirmed complaint per year averaged over a three year period, or three unconfirmed complaints per year averaged over a three-year period. However, District Rule 4102) – Nuisance, exempts odors emanating from agricultural operations. Therefore citizen odor complaints to the District will not result in a recorded complaint or an enforcement action. The District encourages and supports full implementation of the mitigation measures included in the DEIR to reduce this impact.

D-9

Interim Draft BACT Guideline

The following are various control technologies that should be considered for the project. The applicant should contact the District to discuss the control technologies that are best suited to his operation to satisfy the requirements of BACT and to reduce project emissions. For questions on permitting

D-10

¹ California Health and Safety Code section 40920(b)

² Herner, John, Jeremy Aw, Oliver Gao, Daniel P. Chang, and Michael J. Kleeman, "Size and Composition of Airborne Particulate Matter in Northern California: Particulate Mass, Carbon, and Water-Soluble Ions", *Journal of Air and Waste Management Association*, vol. 55, January 2005.

requirements and/or BACT, the applicant should contact **Mr. Ramon Norman, Air Quality Engineer, at (559) 230-5909**

Cow Housing

- Concrete freestall and drylot feed lanes and walkways
- Feed lanes and walkways to be flushed four times a day, scraped four times daily, or vacuumed twice daily
- Drylots sloped to facilitate runoff and drying-minimum of a 3% slope
- Remove feed from feedlane on a daily basis to prevent decomposition
- Pave feedlanes at least 8 feet on the corral side of the fence
- Drylots controlled by windbreaks – Downwind and upwind shelterbelts
- Shade Structures on open corrals
- Weekly Scraping an/or Manure Removal using a Pull Type Manure Harvesting Equipment in morning hours when moisture in air except during periods of rainy weather
- Feeding Young Stock (heifers and calves) Near Dusk
- Individual Calve Hutches (Calves under three months)
- Limiting animal movements and water sprays or soil stabilizers

Milking Center

- Flush/Spray after each batch of milking

Liquid Manure Handling

- Irrigation of crops using liquid and slurry manure from a holding / storage pond

Slurry Manure Handling

- Liquid injection of manure until the crops become tall enough that damage would occur

Solid Manure Handling

- Rapid incorporation of the manure into the soil after land application

Liquid Manure Management

- Aerobic lagoon (aeration) – (Usually not technologically feasible)
- Anaerobic digester system with 95% VOC control of captured biogas (IC engine w/catalyst or equivalent) (Must only commit to installing if required by final BACT)
- Anaerobic Treatment Lagoon designed according to NRCS Guideline (two cell system: Mechanical separator – anaerobic treatment lagoon – Storage Pond – Flush from storage Pond)

Mechanical Separators

- Dewatering press to reduce moisture content of separated solids (dehydrator or screw press or similar)
- Weekly removal of separated solids

Settling basins/Weeping Walls

- Dry contents in basins within a 2-week period
- Contents must be directly incorporated into land or spread in thin layers, harrowed and dried.

D-10
cont.

Feed

- Animals fed in accordance with Natural Resource Conservation Service or other District approved guidelines utilizing routine nutritional analysis for rations
- Cover or ensile all silage Piles except the face of pile
- Silage Face Management
- Cover all piles
- All dry grain to be stored in commodity barns

On-field Crop(s) Activities

- Minimize passes
- Practice conservation tillage
- Restrict field activity during high wind events (>20 mph)
- Surface roughening of fallow fields
- Track-out prevention

D-10
cont.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call me at (559) 230-5800 or Mr. Dave Mitchell, Planning Manager, at (559) 230-5807 and provide the reference number at the top of the first page of this letter.

D-11

Sincerely,



Elena Nuño
Air Quality Specialist
Central Region

c: Sheraz Gill, Senior Air Quality Engineer
Ramon Norman, Air Quality Engineer
Leland Villalvazo, Supervising Air Quality Specialist
file

Response to Letter D

Commentor San Joaquin Valley Air Pollution Control District,
May 31, 2005

D-1 The comment reviews the status of air quality and air quality attainment in the San Joaquin Valley Air Basin. The Air Basin has been designated nonattainment by the EPA and Air Resources Board for ozone and fine particulate matter. The Federal Clean Air Act and the California Clean Air Act require areas designated nonattainment to reduce emissions until standards are met.

The comments raises no new environmental issues, and no further response or modification of the EIR is necessary to respond. For a discussion of regulations for air quality and the attainment status of Merced County and the San Joaquin Valley, see Section 6.2 of the DEIR (pps. 6-3 to 6-13).

D-2 The District concurs with the regulatory and environmental characterization of air quality found in the DEIR. The proposed project would be subject to District Rule 2201, which requires Best Available Control Technology for new emission units.

As stated in Section 6, *Air Quality*, of the DEIR, (pp. 6-63), "District Rule 2201, New and Modified Stationary Source Review (NSR), applies to new and modified sources of air pollution that are subject to the District's permitting requirements. Best Available Control Technology (BACT) and Best Available Control Retrofit Technology (BACRT) is a key NSR requirement that applies to new or modified sources of air pollution that result in increase in emissions greater than 2 pounds per day." However, Mitigation Measures AQ-3 does not explicitly identify Rule 2201.

The following correction to Section 6, Air Quality, of the DEIR (pp. 6-64) is included in the FEIR:

Mitigation Measure AQ-3: The applicant shall implement the above requirements of the ACO; comply with SJVAPCD Rules 2201 (New Source Review), 4570 (Confined Animal Facilities), 4701 and 4702, Internal Combustion Engines; apply for an Authority to Construct/Permit to Operate in compliance with SJVAPCD New Source Review; and implement BACT and BACRT appropriate for this dairy operation as determined by SJVAPCD.

Implementation of this modification to Mitigation Measure AQ-3 would not change the significance conclusion of the EIR with respect to impact AQ-3, nor would it require any measures to be implemented outside of the dairy site as assessed in the DEIR. Therefore, no further response or modification of the EIR is necessary to respond. Because Merced County will impose this measure on the project upon approval of the Antonio Teixeira Dairy Expansion, none of the conditions set forth in CEQA Guidelines §15088.5 is present, and no recirculation of the EIR would be necessary.

- D-3 The comment reviews recent legislation and new regulatory requirements, including District Rule 4570: Confined Animal Facilities, which was adopted by the District's Governing Board on June 15, 2006.

As stated in Section 6, *Air Quality*, of the DEIR (pps. 6-1 through 6-84) and as included in the Merced County Animal Confinement Ordinance regulations, the project would be required to comply with all applicable District rules. The project applicant must comply with the new District Rule 4570. For the text of District Rule 4570, please refer to Appendix A, *Rule 4570, Confined Animal Facilities*, of this FEIR

For a correction to Section 6, Air Quality, of the DEIR (pp. 6-64) is included in the FEIR and amendment of Mitigation Measure AQ-3 to include Rule 4570, see response to comment D-2.

Implementation of this modification to Mitigation Measure AQ-3 would not change the significance conclusion of the EIR with respect to impact AQ-3, nor would it require any measures to be implemented outside of the dairy site as assessed in the DEIR. Therefore, no further response or modification of the EIR is necessary to respond. Because Merced County will impose this measure on the project upon approval of the Antonio Teixeira Dairy Expansion, none of the conditions set forth in CEQA Guidelines §15088.5 is present, and no recirculation of the EIR would be necessary.

- D-4 The comment indicates that District concurs with the County's assessment of AQ-1.

Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no further response or modification of the EIR is necessary to respond.

- D-5 The comment recognizes the County's authority to determine its own threshold of significance. The District finds impact AQ-3 less-than-significant (rather than significant and unavoidable as found by the County). The District bases their assessment on their Guide for Assessing and Mitigating Air Quality Impacts.

Comment noted. The DEIR impact AQ-3 (pps. 6-60 to 6-64) evaluates the total emissions for the expanded dairy operations, rather than the new increment of air emissions from the expansion. The County takes this conservative assessment approach in light of: 1) the air basin is in nonattainment for ozone precursor emissions; 2) the air basin does not have an adopted ozone attainment plan; and 3) the emissions from the existing dairy operations already exceed the District's significance thresholds. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

- D-6 The comment states that the District concurs with the County's assessment to of Impact AQ-4. The District will be conducting its own fugitive dust analysis during District permitting. The applicant is encouraged to apply for the District's Authority to Construct permit as expeditiously as possible.

Comment noted. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

- D-7 The comment provides additional information regarding Impact AQ-5 for consideration. The District acknowledges that ammonia emissions are a concern because they are a secondary source for the formation of ammonium nitrate particulate matter. The District provides new research findings that a control strategy focused on NOx reductions alone would be most effective in limiting PM_{2.5} formation. This leads the District to find that added ammonia emissions would not contribute significantly to a decline in air quality. The District acknowledges that high concentrations of ammonia emissions could be significant with respect to workers health. The District will be performing a Health Risk Assessment (HRA) for the proposed dairy expansion to determine if the ammonia and hydrogen sulfide emissions exceed the District's thresholds for toxics and hazardous pollutants.

Comment noted. Until the HRA for ammonia and hydrogen sulfide emissions is complete, the project's ammonia emissions remain at an unknown level of significance. Thus, the County continues to find that Impact AQ-5 remains significant and unavoidable given the uncertainty of the findings from the District's ammonia emissions HRA. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

- D-8 The comment states that the District has no authority to regulate Greenhouse Gas generation and offers no comment regarding the significance of Impact AQ-6.

Comment noted. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

- D-9 The comment states that the District concurs with the County's assessment of Impact AQ-7. The District states that a significant odor problem is defined as more than one confirmed complaint per year over a three year average, or three unconfirmed complaints per year averaged over a three-year period. The District states that District Rule 4102 – Nuisance, exempts odors emanating from agricultural operations, so that any citizen odor complaints would not result in a recorded complaint or enforcement action. The District encourages and supports full implementation of the Mitigation Measures AQ-7 included in the DEIR to reduce this impact.

Comment noted. According to Merced County Division of Environmental Health (DEH) records, no odor complaints have been received to date for the existing dairy operation. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

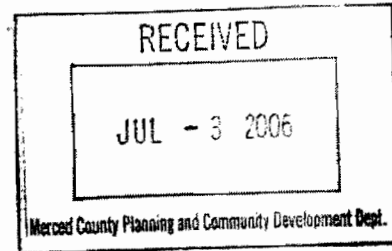
- D-10 The District provides a list of various control technologies that should be considered for this project and suggests that the applicant contact the District to discuss the control technologies that are best suited for his operation to satisfy the requirements of BACT and to reduce project emissions.

Comment noted. As part of project implementation, the project applicant will comply with all District rules and permit requirements, including coordinating with the District in the development of BACT to reduce project emissions. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

- D-11 The District provides contact information for further coordination to discuss the District regulatory requirements concurs that apply to the proposed project.

Comment noted. As part of project implementation, the project applicant will comply with all District rules and permit requirements, including coordinating with the District. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

MID MERCED IRRIGATION DISTRICT



June 29, 2006

John LeVan
Merced County Planning Department
2222 'M' Street
Merced, CA 95340

Letter E

Subject: Notice of Preparation of a DEIR – Expansion of Antonio Teixeira Dairy –
Conditional Use Permit No. 05-033

Dear Mr. LeVan:

The Merced Irrigation District (MID) has reviewed the above referenced application and offers the following comments:

1. MID operates and maintains the Ward Canal located within an 80-foot wide fee strip as recorded in Volume 1315, Official Records, Page 381 and Volume 214, Official Records, Page 165, Merced County Records, along the south side of the subject property.
2. MID operates and maintains the Ward D and D-1 Laterals in both open and pipelined easements located just west of the Railroad commencing at the Ward Canal thence northerly and westerly to their termini within the subject property as recorded February 1, 1922 in Volume 12, Official Records, Page 1, Merced County Records.

E-1

MID respectfully requests that the County require the following, as conditions of approval:

1. MID will not accept any agricultural drainage or nutrient enriched water from the property into its canals or laterals.
2. Septic system leach fields shall be a minimum of 50 feet from any open MID facility or 20 feet from a piped facility to protect the facility from contamination and to protect the septic systems from leakage from MID facilities.

E-2

3. The property owner must obtain a "Non-exclusive License Agreement" for any new or existing crossings over or under any of the MID's facilities, including bridges, utilities and pipelines.
4. Wherever there is a commingling of wastewater containing manure at an MID irrigation delivery point, a backflow prevention device meeting MID standards must be installed. The purpose of the installation is to keep wastewater containing manure from entering any MID facilities and contaminating the water in the facilities.
5. All wastewater facilities must maintain a minimum 50-foot setback from any irrigation district facility or right of way.

Thank you for the opportunity to comment on the above referenced application. If you have any questions, please contact me at 722-5761.

Sincerely,



Robert Acker
Director of Facilities and Streams

cc: Garith Krause, General Manager
Ted Selb, Deputy General Manager
Hicham ElTal, Assistant General Manager - Water Resources Engineering
Ron Price, Associate Engineer - Water Resources
Rory Randol, Facilities Specialist

Response to Letter E

Commentor Merced Irrigation District,
June 29, 2006

E-1 The comment identifies the location of the Ward Canal and Ward laterals D and D-1 immediately south of and within the project site.

Comment noted. Since no new or modified environmental effect is identified by the comment and no new or modified mitigation is necessary or appropriate, no revision of the EIR would be required.

E-2 The comment respectfully requests that the County require the following as conditions of approval:

- 1) MID will not accept any agricultural drainage or nutrient enriched water from the property into its canals or laterals.
- 2) Septic system leach fields shall be a minimum of 50 feet from any open MID facility or 20 feet from a piped facility to protect the facility from contamination and to protect the septic systems from leakage from MID facilities.
- 3) The property owner must obtain a “Non-exclusive License Agreement” for any new or existing crossings over or under any of the MID’s facilities, including bridges, utilities and pipelines.
- 4) Wherever there is a commingling or wastewater containing manure at an MID irrigation delivery point, a backflow prevention device meeting MID standards must be installed. The purpose of the installation is to keep wastewater containing manure from entering any MID facilities and contaminating the water in the facilities.
- 5) All wastewater facilities must maintain a minimum of 50-foot setback from any irrigation district facility or right of way.

Items 1, 4, and 5 are required of all dairy operators by the Merced County Animal Confinement Ordinance (ACO Sections 18.48.050 V, and EE, and 18.48.060 M). Regarding item 2, no new or modified septic system is proposed with the project under review. Item 3 does not address a potential environmental impact that falls within the scope of this EIR and CEQA. However, the County will include the specific requirements of MID cited in the letter as conditions of approval for the Antonio Teixeira Dairy Expansion project’s Conditional Use Permit. Since the comment raises no new environmental issues, no further response or modification of the EIR is necessary to respond.



MERCED COUNTY MOSQUITO ABATEMENT DISTRICT

3478 Beachwood Drive • P.O. Box 909 • Merced, California 95341
209-722-1527 • 800-622-3242 • Fax: 209-722-3051

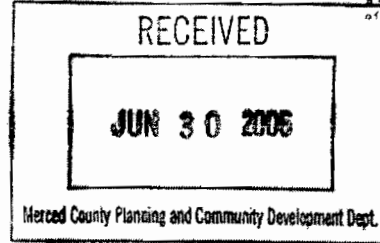
MEMBER



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MVC
ASSOCIATION
OF CALIFORNIA

June 29, 2006



John LeVan
Merced County
Department of Planning and Community Development
2222 "M" Street
Merced, CA 95340

RE: Antonio Texeira Dairy Expansion

Letter F

Dear Mr. Levan,

Merced County Mosquito Abatement District personnel have reviewed the Draft Environmental Impact Report for the Antonio Texeira Dairy Expansion located near Cressey. Additionally, District personnel inspected the property and noted the south end of the retention basin and the entirety of an adjacent settling basin contained vegetative growth. The vegetation is providing harborage for mosquito larvae to complete their life cycle.

Dairy retention basins provide excellent habitat for *Culex pipiens* complex. *Culex pipiens* complex were incriminated as a primary vector of West Nile Virus in Merced County in 2005. This mosquito species is also an excellent vector of St. Louis Encephalitis. Larvae of this species thrive in a variety of foul water sources, which are high in organic content. The adults prefer avian hosts, large mammals, and man for blood meals. *Culex pipiens* complex have dispersal rates of 2.4 – 3.1 miles from the breeding site. Consequently, residents of Cressey (including Cressey School) may be adversely affected by mosquitoes breeding in an unkempt dairy retention pond. The best means of mosquito control is to maintain the wastewater lagoons in accordance District guidelines.

Properly managed dairies will decrease mosquito control expenditures, significantly improve animal health at these facilities, and protect the public from vector and nuisance mosquitoes. Please contact the District Office if you require additional information.

Respectfully submitted,

Allan D. Inman
Manager-Entomologist

F-1

Response to Letter F

Commentor Merced County Mosquito Abatement District,
June 29, 2006

F-1 The comment states the Mosquito Abatement District concerns regarding breeding potential for *Culex pipiens* complex, and the best means for mosquito control is to maintain wastewater lagoons in accordance with Mosquito Abatement District guidelines.

The Hazards section of the DEIR (pps. 8-1 to pps. 8-14) evaluates the nuisance and health effects of mosquitoes from dairy operations, including Impact HAZ-1, which specifically assesses potential health hazards impacts from mosquitoes. In addition, the County applies the Animal Confinement Ordinance (ACO) to all such projects. Specific ACO requirements applying to mosquito control includes Section 18.48.060 C: “The inside banks of all pits, sumps, retention ponds and settling basins shall be maintained free of vegetative growth in order to prevent a breeding habitat for mosquitoes or other vectors”; and 18.48.050 X, which requires that all dairies comply with Mosquito Abatement District requirements. The facility is not in compliance with these ACO requirements. Additionally, mitigation measure HAZ-1a3 requires that, “Solids floating on the surface of ponds and lagoons should be removed no less frequently than weekly.” To ensure compliance with ACO and District requirements, and mitigation identified in the EIR, mitigation measure HAZ-1 will be modified as follow:

Mitigation Measure HAZ-1: Adherence to the guidelines of the Merced County Mosquito Abatement District and correct design and management of the dairy wastewater containment systems are required to comply with the Merced County ACO and would prevent significant mosquito production. The following additional measures are identified to further reduce adverse effects from mosquitoes.

- A. The Vector Control Plan for mosquitoes required by the Merced County Animal Confinement Ordinance, shall contain, but not be limited to, the following operational measures to be implemented during project operations as identified by University of California Cooperative Extension (UCCE):
1. Owners are responsible for weed and floatage control.
 2. Separator bypass drains must be equipped to prevent pond floatage.
 3. Solids floating on the surface of ponds and lagoons should be removed no less frequently than weekly.
 4. Lagoon/Pond-to-field discharges should not stand more than 4 days.

B. If requested, the project proponent will pay any excess treatment cost expended by the Mosquito Abatement District.

C. To ensure compliance with ACO and Merced County Mosquito Abatement District (MCMAD) requirements, prior to the issuance of a building permit by the County Building Division, the Merced County Division of Environmental Health (DEH) and MCMAD shall inspect waste management and irrigation systems at the Antonio Teixeira Dairy to ensure that they are in compliance with ACO mosquito control requirements, Mosquito Abatement District requirements, and the additional requirements of this mitigation measure. Building permits may be issued upon written assurance from DEH and the MCMAD that the facility is in compliance with these requirements.

Potential Environmental Effects of Measure: All physical improvements or activities that could result in changes to the physical environment required by this measure would be located within the project site. The impacts of implementing such measures, if any, would be similar to those identified for the project in Chapters 5 through 8 of this (D)EIR.

Significance after Mitigation: Implementation of these mitigation measures would reduce this impact to below a level of significance.

Implementation of this modification to Mitigation Measure HAZ-1 would not change the significance conclusion of the EIR with respect to impact HAZ-1, nor would it require any measures to be implemented outside of the dairy site as assessed in the DEIR. Therefore, no further response or modification of the EIR is necessary to respond. Because Merced County will impose this measure on the project upon approval of the Antonio Teixeira Dairy Expansion, none of the conditions set forth in CEQA Guidelines §15088.5 is present, and no recirculation of the EIR would be necessary.

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4 CHANGES TO THE TEXT OF THE EIR

This chapter sets forth all substantive changes to the Environmental Impact Report (EIR) that occurred after publication of the Draft EIR. Such changes update or correct misinformation or errors in the text noted by Merced County, as well as changes made in response to public and agency comment on the Draft EIR. Within this chapter, additions to text are indicated by underlining; deletions of text are designated by ~~strike through~~. The chapter and section references are ordered as they appear in the Draft EIR. If a DEIR chapter or section does not appear in this Chapter 4, no corrections or modifications were necessary. There would be no change in the residual significance of identified impacts with the updated information presented below, and no further modification of the EIR would be necessary.

6 AIR QUALITY

The following corrections are made to Chapter 6.0, Section 6.3.2 of the DEIR.

6.3 ENVIRONMENTAL IMPACTS

6.3.2 ENVIRONMENTAL IMPACTS

Impact AQ-3: Ozone precursor emissions (Reactive Organic Gases and Nitrogen Oxides) from dairy operations, farm equipment, and increased traffic

Emissions of ROG and NO_x from operations, farm equipment, and increased traffic at the Antonio Teixeira Dairy Expansion would exceed SJVAPCD emissions criteria with establishment of the herd. This would be a significant impact.

Setting information regarding ROG, NO_x, and ozone, including the major sources of the pollutants; their potential for adverse environmental effects; the trend of the pollutants in the San Joaquin Valley and Merced County both in terms of number of violations and concentration in the environment; the amount of the pollutants emitted in the San Joaquin Valley and Merced County; the role of animal confinement facilities in the emissions; and potential human health effects, is presented in Section 6.1 of this Chapter.

In California, agricultural and livestock operations formerly were exempt from permitting requirements but were responsible for following rules related to construction, such as dust control. As a result of legal action, the EPA has overruled this state exemption for agricultural activities due to inconsistency with the CAA. Under terms of a settlement agreement with interested parties, the EPA has required that farms operating diesel-powered engines for farming

operations submit an application for permit under Title V of the CAA by May 14, 2003. In general, dairies that exceed the thresholds of 1,190 animals must obtain a Permit to Operate from the SJVAPCD as well as undergo New Source Review requirements to determine if new emission sources trigger BACT. Agricultural operations, including animal confinement facilities, must apply for a Title V permit if they exceed new source review thresholds of 25 tons per year of VOC or NO_x.

Three sources of ROG and NO_x emissions are associated with animal confinement facilities: farming equipment exhaust, manure management, and increased vehicle exhaust. These sources are discussed below.

Farming Equipment and Increased Traffic

Vehicular traffic from the Antonio Teixeira Dairy Expansion generates 50 to 60 average daily trips of passenger vehicles and light trucks. Farming equipment such as tractors, milk trucks, back up generators and pumps are used as part of current dairy confinement operations. The use of this equipment accounts for another 10 to 20 trips per day and contributes to exhaust emissions. The primary ozone precursor emissions associated with exhaust emissions from construction related equipment consist of ROG and NO_x.

Onsite farm operations for a typical dairy are calculated to consume 2.7 billion horsepower hours, based upon estimates in the CARB area source emissions inventory (1990). This energy expenditure, combined with emissions factors in the South Coast Air Quality Management District (AQMD) *CEQA Handbook*, produces emissions estimates of 0.4 tons per year of ROG and 4.6 tons per year of NO_x.

Manure Management

The project sponsor has applied for an Administrative Permit from Merced County to expand the existing dairy of 900 Holstein milk cows, 125 dry cows, 550 bred heifers, 100 calves aged 3 to 12 months (2,065 AU) to house a total of 1,250 Holstein milk cows, 250 dry cows, 400 bred heifers, 150 heifers 1 year to breeding, 400 calves aged 3 to 12 months and 150 baby calves (2,904 AU).

Reactive organic gases are an ozone precursor and are produced during the anaerobic decomposition of cattle manure. Studies suggest that the ROG generation factor from cattle manure decomposition is 19.3 lbs/head/year for open corral and 21 lbs/head/year for freestall (www.valleyair.com). No emissions factors for NO_x are currently accepted by the scientific community (Shaw, 2001; Eckard, et. al.).

ROG emissions from the Antonio Texeira Dairy Expansion are set forth below. Since the milking cows are in freestalls, that emission factor is being applied to those cows; since the remainder of the herd is in open corrals, the emission factors for open corrals are being applied by the other age classes. ROG emissions from all animal confinement facilities in the San Joaquin Valley are discussed in Section 10.1, *Cumulative Impacts*. Dairy emission factors for ROG have recently been updated by the SJVAPCD to reflect the lifecycle of the cow.

Table 6-8 ROG Emissions for the Proposed Antonio Texeira Dairy						
Cow Type	No. of Existing Cows	No. of Proposed Cows	Emission Factor	ROG emissions existing (lbs/head-yr)	ROG emissions proposed (lbs/head-yr)	Increase in ROG Emissions (lbs/head-yr)
Holstein Milk Cow	900	1,250	21.0	18,900	26,250	7350
Dry Cow	125	250	11.9	1,488	2,975	1,487
Bred Heifers	550	400	8.3	4,565	3,320	-1,245
Heifers 1+	0	150	7.2	0	1,080	1,080
Calves	100	550	6.6	660	3,630	2,970
Totals:				25,613	37,255	11,642
Tons/Year				12.81	18.63	5.82

Source: Planning Partners, March 2006, Sheraz Pers. Comm. 2006.

Aggregated ROG emissions for all activities associated with the Antonio Texeira Dairy Expansion are presented below.

Emission Source	Antonio Texeira Dairy Expansion ROG Emissions
Equipment and Increased Traffic	0.4 tons/year
Manure Management	18.63 tons/year
Total	19.03 tons/year
SJVAPCD Significance Criterion	10 tons/year
Criterion Exceeded?	YES

NO_x emissions from equipment and vehicle traffic would be approximately 0.4 tons per year. Emissions from manure management would add 18.63 tons per year to this total.

The following requirements of the ACO apply to this impact: Chapter 18.48.50 – General, U and OO.

18.48.50 General

- U. The animal confinement facility and access roads shall meet the requirements of the San Joaquin Valley Unified Air Pollution Control District.
- OO. Animal confinement facilities constructed and expansions of existing facilities resulting in more than a 10% increase in mature animals, after the effective date of this ordinance that exceed the significance threshold for new sources for either reactive organic gases (10 tons/year) or PM₁₀ (15 tons/year)

established by the San Joaquin Valley Unified Air Pollution Control District, shall reduce air emissions for these compounds to a level below the significance threshold. Air emission thresholds will be determined by the inclusion of the total air emissions from the facility. The schedule for compliance is as follows: 1) Submit plans and calculations showing compliance no later than January 1, 2007. 2) Construction of improvements and/or implementation of reduction measures must be completed no later than January 1, 2008, 3) New animal confinement facilities constructed after January 1, 2008 shall submit plans as part of the CNMP indicating compliance to the PM₁₀ and reactive organic gas (ROG) threshold criteria. If the San Joaquin Valley Unified Air Pollution Control District adopts regulations for the control of ROG and/or PM₁₀ emissions for animal confinement facilities, Chapter 18.48.050 OO is void.

BACT and BACRT now apply to agricultural operations. A dairy consists of many sources of emissions, including the milking center, lagoons, cow housing, feeding areas, manure storage piles, and on-field manure-handling activities. Best Available Control and Retrofit Technology can be defined by the following categories: (a) Cow Housing and Feeding; (b) Dairy Waste Treatment Lagoon; (c) Milking Center; (d) Dairy Manure Storage; and (e) Dairy Manure Land Application. Dairy cows generate anywhere from 80 to 120 pounds of manure per day. How the manure is collected, stored, and treated depends directly on the manure management techniques of a dairy.

District Rule 2201, New and Modified Stationary Source Review (NSR), applies to new and modified sources of air pollution that are subject to the District's permitting requirements. BACT and BACRT is a key NSR requirement that applies to new or modified sources of air pollution that result in increase in emissions greater than 2 pounds per day. BACT and BACRT does not apply retroactively to existing, unmodified sources. BACT and BACRT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis.

BACT and BACRT determination is an integral part of the permit review process. On a case-by-case basis, the District and applicant must determine the control technology for each application that satisfies the above BACT and BACRT definition for the particular emissions unit and class of source being proposed. Towards that end, the District performs a five-step top-down analysis that accomplishes the following:

- Step 1: Identify all possible control technologies for the emission unit in question.
- Step 2: Eliminate controls that are not technologically feasible for the class of source or the particular emission unit being reviewed. To exclude a control option, a demonstration of technological unfeasibility must be clearly documented and should show, based on

physical, chemical, and engineering principles, the technical difficulties which would preclude the successful use of the control option for the emissions unit under review.

Step 3: All remaining controls are ranked by their control effectiveness.

Step 4: A cost effectiveness analysis is performed in which economic impacts are considered, to arrive at the final level of control. The cost effectiveness of each alternative is determined by calculating the annual cost in dollars per ton of emissions reduced. Control options that are not cost effective, except for controls that have been achieved in practice or are required by an EPA approved SIP, are eliminated from consideration.

Step 5: The most effective control not eliminated under step 4 is selected as BACT. A detailed description of the District's BACT determination policies and procedures is contained in District Policy APR 1305.

Operation of the Antonio Teixeira Dairy Expansion would exceed SJVAPCD significance criteria for ozone precursors and would trigger New Source Review, BACT, BACRT, and the requirement to obtain an Authority to Construct/Permit to Operate.

Significance of Impact: Significant.

Mitigation Measure AQ-3: The applicant shall implement the above requirements of the ACO; comply with SJVAPCD Rules 2201 (New Source Review), 4570 (Confined Animal Facilities), 4701 and 4702 (Internal Combustion Engines); apply for an Authority to Construct/Permit to Operate in compliance with SJVAPCD New Source Review; and implement BACT and BACRT appropriate for this dairy operation as determined by SJVAPCD.

Potential Environmental Effects of Measure: While physical improvements or activities that could result in changes to the physical environment could be required by this measure, it is anticipated that all emissions reductions measures would occur within the footprint of the existing dairy, so no significant impacts would result. Facilities necessary to comply with the ACO and SJVAPCD requirements would be constructed within the overall facility footprint of the Antonio Teixeira Dairy Expansion as assessed in this EIR.

Significance after Mitigation: Because the BACT and BACRT required by the above mitigation measure has not been formally adopted by the SJVAPCD and may not reduce project ROG emissions below the threshold of significance, and because the San Joaquin Valley Air Basin is in severe nonattainment for 1-hour state ozone standard and serious nonattainment for 8-hour federal ozone standard, this impact would remain significant and unavoidable.

8 HAZARDS (NUISANCE INSECTS)

The following corrections are made to Chapter 8.0, Section 8.3.2 of the DEIR.

8.3 ENVIRONMENTAL IMPACTS

8.3.2 ENVIRONMENTAL IMPACTS

Impact HAZ-1: Mosquitoes

Implementation of the proposed Antonio Texeira Dairy Expansion project could provide additional mosquito-breeding habitat. This would be a potentially significant impact.

Potential habitat for mosquitoes at the Antonio Texeira Dairy Expansion project includes the existing settling basins, wastewater lagoons, and process ponds. Undesirable numbers of mosquitoes could occur if these facilities are improperly managed so that weeds build up along the sides of basins, mats of solids float within lagoons, or if water levels of “beach areas” of lagoons are not fluctuated to alternately flood or dry out areas where insects lay eggs. Lagoons that become mosquito breeding grounds are those with less than two (2) feet of free bank space (freeboard) from surface to top of levee, that have “dead” corners where little wind action can occur, or where floating solids are not mechanically corralled to one end of the lagoon and removed.

The ACO contains the following provisions related to mosquitoes.

18.48.050 General

- H. Liquid manure utilized for irrigation purposes shall be managed so that it does not stand in the application field for more than 24 hours.

18.48.060 Retention Ponds and Settling Basins

- B. The retention pond(s) and setting basin(s) shall be surrounded by a road at least 14 feet wide and suitable for safe passage of vector control vehicles and equipment. The road should be accessible at all times to provide for the use of vehicle-mounted mosquito control equipment.
- C. The inside banks of all pits, sumps, retention ponds and settling basins shall be maintained free of vegetative growth in order to prevent a breeding habitat for mosquitoes or other vectors.
- J. Settling basins shall not exceed 60 feet in width and retention ponds shall not exceed 100 ft. in width, unless reviewed by the Merced County Mosquito Abatement District. The district may charge the owner/operator for the cost of mosquito control.
- K. Any liner installed by importing soil shall have a thickness of at least one (1) foot.

- S. New facilities shall install a flow meter and associated plumbing on the effluent line from the retention pond or describe how flow rates to application fields will be accurately determined.

The Merced County Mosquito Abatement District provides the following guidelines for the construction and management of dairy wastewater systems to prevent significant mosquito production:

- Wastewater holding ponds should not exceed 100 feet in width;
- All fencing around wastewater and solids ponds should be placed on the outside of the 14 foot lanes and gates to provide easy access;
- No drainage lines should by-pass the separator ponds, except those that provide for normal corral run-off. All such drain inlets must be sufficiently grated to prevent solids accumulation in the retention ponds; and,
- Floatage of any solid substance that could provide harborage for immature mosquito stages should be kept out of all wastewater retention ponds.

The existing project facilities are in compliance with all provisions of the Mosquito Abatement District and the ACO related to site design to control mosquitoes, except one. An existing wastewater lagoon for the Antonio Teixeira Dairy Expansion currently exceeds the dimensions outlined in the ACO (Chapter 18.48.060 J) and recommended by the Mosquito Abatement District. These guidelines state that wastewater holding ponds should not exceed 100 feet in width. The existing pond is approximately 462 feet wide. However, the wastewater ponds and settling basins are located greater than 1,000 feet from any surrounding residence, which would reduce the potential for nuisance conditions due to mosquitoes for sensitive receptors in the vicinity of the project. The oversized wastewater pond may incur increased treatment costs for the District. The following mitigation measure would be required to further reduce the potential for significant mosquito production.

Significance of Impact: Potentially significant.

Mitigation Measure HAZ-1: Adherence to the guidelines of the Merced County Mosquito Abatement District and correct design and management of the dairy wastewater containment systems are required to comply with the Merced County ACO and would prevent significant mosquito production. The following additional measures are identified to further reduce adverse effects from mosquitoes.

- A. The Vector Control Plan for mosquitoes required by the Merced County Animal Confinement Ordinance, shall contain, but not be limited to, the following operational measures to be implemented during project operations as identified by University of California Cooperative Extension (UCCE):
1. Owners are responsible for weed and floatage control.
 2. Separator bypass drains must be equipped to prevent pond floatage.
 3. Solids floating on the surface of ponds and lagoons should be removed no less frequently than weekly.
 4. Lagoon/Pond-to-field discharges should not stand more than 4 days.
- B. If requested, the project proponent will pay any excess treatment cost expended by the Mosquito Abatement District.
- C. To ensure compliance with ACO and Merced County Mosquito Abatement District MCMAD) requirements, prior to the issuance of a building permit by the County Building Division, the Merced County Division of Environmental Health (DEH) and MCMAD shall inspect waste management and irrigation systems at the Antonio Texeira Dairy to ensure that they are in compliance with ACO mosquito control requirements, Mosquito Abatement District requirements, and the additional requirements of this mitigation measure. Building permits may be issued upon written assurance from DEH and the MCMAD that the facility is in compliance with these requirements.

Potential Environmental Effects of Measure: All physical improvements or activities that could result in changes to the physical environment required by this measure would be located within the project site. The impacts of implementing such measures, if any, would be similar to those identified for the project in Chapters 5 through 8 of this EIR.

Significance after Mitigation: Implementation of these mitigation measures would reduce this impact to below a level of significance.